

WHAT IS CLAIMED IS:

1. An electronic camera comprising:  
a photographic lens configured to form an object  
image;

5 an image sensing element configured to  
photoelectrically convert the formed object image;

a light guiding device configured to guide  
incident light from an object, which is incident from  
the photographic lens, to a first optical path to the  
10 image sensing element and a second optical path  
different from the first optical path;

a holding frame structure configured to surround  
the image sensing element and the light guiding device,  
the holding frame structure comprising an intimately  
15 contacting member made of a heat-conducting material  
and intimately contacting with the image sensing  
element; and

a lens casing configured to accommodate the  
photographic lens, the lens casing comprising a heat-  
20 radiating portion made of a heat-conducting material  
and configured to radiate heat to an outside of the  
camera,

wherein the holding frame structure and the lens  
casing are arranged such that heat from the intimately  
25 contacting member is conducted to the heat-radiating  
portion.

2. The camera according to claim 1, wherein the

holding frame structure comprising the intimately contacting member formed of a plate member, and a heat-transfer frame member formed of a box member, which is made of heat-conducting material, surrounds the light guiding device, and is thermally connected to the intimately contacting member, and wherein the heat-radiating portion is thermally connected to the heat-transfer frame member.

3. The camera according to claim 2, wherein the plate member has a first face facing the light guiding device, and a second face on the reverse of the first face, the image sensing element intimately contacts with the first face, and a circuit board intimately contacts with the second face.

4. The camera according to claim 3, wherein the image sensing element is electrically connected to the circuit board.

5. The camera according to claim 1, wherein the light guiding device comprises a light splitting device configured to split the incident light to the first and second optical paths.

6. The camera according to claim 5, wherein the light splitting device comprises a member selected from the group consisting of a beam splitter and a half mirror.

7. The camera according to claim 1, wherein the light guiding device comprises an optical path

switching device configured to switch first and second states in which the incident light is output to the first and second optical paths, respectively.

5       8. The camera according to claim 7, wherein the optical path switching device comprises a movable mirror.

9. An electronic camera comprising:

        a photographic lens configured to form an object image;

10       an image sensing element configured to photoelectrically convert the formed object image;

        a light guiding device configured to guide incident light from an object, which is incident from the photographic lens, to a first optical path to the  
15       image sensing element and a second optical path different from the first optical path;

        a holding frame structure configured to surround the image sensing element and the light guiding device, the holding frame structure comprising an intimately  
20       contacting member made of a heat-conducting material and intimately contacting with the image sensing element;

        an outer casing configured to accommodate the image sensing element, the light guiding device, and  
25       the holding frame structure, the outer casing comprising a heat-radiating portion made of a heat-conducting material and configured to radiate heat to

an outside of the camera; and

5 a lens casing configured to accommodate the photographic lens, the lens casing comprising a heat-radiating portion made of a heat-conducting material and configured to radiate heat to an outside of the camera,

10 wherein the holding frame structure, the outer casing, and the lens casing are arranged such that heat from the intimately contacting member is conducted to both the heat-radiating portions.

15 10. The camera according to claim 9, wherein the holding frame structure comprising the intimately contacting member formed of a plate member, and a heat-transfer frame member formed of a box member, which is made of heat-conducting material, surrounds the light guiding device, and is thermally connected to the intimately contacting member, and wherein both the heat-radiating portions are thermally connected to the heat-transfer frame member.

20 11. The camera according to claim 10, wherein the plate member has a first face facing the light guiding device, and a second face on the reverse of the first face, the image sensing element intimately contacts with the first face, and a circuit board intimately  
25 contacts with the second face.

12. The camera according to claim 11, wherein the image sensing element is electrically connected to the

circuit board.

13. The camera according to claim 9, wherein the light guiding device comprises a light splitting device configured to split the incident light to the first and second optical paths.

14. The camera according to claim 13, wherein the light splitting device comprises a member selected from the group consisting of a beam splitter and a half mirror.

15. The camera according to claim 9, wherein the light guiding device comprises an optical path switching device configured to switch first and second states in which the incident light is output to the first and second optical paths, respectively.

16. The camera according to claim 15, wherein the optical path switching device comprises a movable mirror.

17. An electronic camera comprising:  
a photographic lens configured to form an object image;

an image sensing element configured to photoelectrically convert the formed object image;

a light guiding device configured to guide incident light from an object, which is incident from the photographic lens, to a first optical path to the image sensing element and a second optical path different from the first optical path;

a holding frame structure configured to surround the image sensing element and the light guiding device, the holding frame structure comprising an intimately contacting member formed of a plate member, which is made of a heat-conducting material and intimately contacts with the image sensing element, and a heat-transfer frame member formed of a box member, which is made of heat-conducting material, surrounds the light guiding device, and is thermally connected to the intimately contacting member; and

an outer casing configured to accommodate the image sensing element, the light guiding device, and the holding frame structure, the outer casing comprising a heat-radiating portion made of a heat-conducting material and configured to radiate heat to an outside of the camera,

wherein the holding frame structure and the outer casing are arranged such that the heat-radiating portion is thermally connected to the heat-transfer frame member, and heat from the intimately contacting member is conducted to the heat-radiating portion.

18. The camera according to claim 17, wherein the plate member has a first face facing the light guiding device, and a second face on the reverse of the first face, the image sensing element intimately contacts with the first face, and a circuit board intimately contacts with the second face.

19. The camera according to claim 18, wherein the image sensing element is electrically connected to the circuit board.

5 20. The camera according to claim 17, wherein the light guiding device comprises a light splitting device configured to split the incident light to the first and second optical paths.

10 21. The camera according to claim 17, wherein the light guiding device comprises an optical path switching device configured to switch first and second states in which the incident light is output to the first and second optical paths, respectively.